

REMARKS

Claims 1-4, 6, 7, 9-12, 14, 16-28 are pending, in which claims 5, 8, 13, and 15 are canceled without prejudice or disclaimer, claims 4, 6, 7, 12, and 14 are currently amended, and claims 25-28 are newly presented. Care has been exercised to avoid the introduction of new matter.

The Office Action mailed October 4, 2010 rejected claims 1, 3-9, 11-16, and 18-23 as obvious under 35 U.S.C. §103(a) based on *Seid et al.* (US 5,768,271) in view of *Larson et al.* (US 7,188,180), and claims 1-24 as obvious under 35 U.S.C. §103(a) based on Admitted Prior Art (APA), referring to page 3, line 13-page 5, line 20 and Figures 1 and 2 of the application, in view of *Seid et al.* (US 5,768,271) and *Larson et al.* (US 7,188,180).

Applicant expresses appreciation for Examiner Gyorfí's courtesy in granting and conducting a telephonic interview on December 17, 2010. During the interview the claimed invention was explained in light of Applicant's disclosure, the outstanding issues were discussed, and arguments substantially as hereinafter developed were presented. Applicant's attorney pointed out features relating to "wherein intra-VPN traffic is given precedence over extra-VPN traffic by assigning a higher priority to the **first access network logical connection.**" However, no agreement was reached, pending the Examiner's detailed reconsideration of the application upon formal submission of a response to the outstanding Official Action.

The rejection of claims 1, 3-9, 11-16, and 18-23 for obviousness under 35 U.S.C. §103(a) based on *Seid et al.* in view of *Larson et al.*, is respectfully traversed.

Larson et al. separates non-valid VPN packets from valid non-VPN packets, discarding the non-valid VPN packets (See col. 43). The valid non-VPN packets are then sent along the

same path or connection as the valid VPN packets but assigned a lower priority than the valid VPN packets. Reference is made to Fig. 28 of *Larson et al.*, wherein link guard 2805 discards non-valid VPN packets, but both valid VPN packets and valid non-VPN packets are sent along the same path or connection to/from edge router 2802.

This is substantially different from the claimed invention, wherein the “intra-VPN traffic,” i.e., valid VPN packets, “is given precedence over extra-VPN traffic,” i.e., valid non-VPN packets, “by assigning a **higher priority to the first access network logical connection**,” but “the intra-VPN traffic and the extra-VPN traffic are logically **separated into different paths**.” Thus, priority in the claimed invention is assigned to a logical connection and not to packets, *per se*, and the traffic is **segregated** into two different paths, or logical connections. The only different paths in *Larson et al.* constitute the discard path for non-valid VPN packets and the single path taken by both the valid VPN packets (the intra-VPN traffic of the claims) and the valid non-VPN packets (the extra-VPN traffic of the claims).

Since the intra-VPN and extra-VPN traffic of *Larson et al.* are sent along the same path (no separate paths, or logical connections are described), albeit with different priority, it does not teach or suggest the claim feature of “the intra-VPN traffic and the extra-VPN traffic are logically **separated into different paths**.”

To the extent the Examiner could interpret the discarded non-valid VPN packets of *Larson et al.* as being logically separated into a path different from the valid VPN packets, the claimed features are still not suggested. Notably, this interpretation would entail separating the non-valid VPN packets and the valid non-VPN packets into two different paths; but since they are both “extra-VPN traffic,” this would be contrary to the claim language, “wherein said one or more egress routers transmit...**all extra-VPN traffic** to the destination host from sources

outside the VPN **within a second access network logical connection** for extra-VPN traffic, **separate from the first access network logical connection.**”

Moreover, to the extent the Examiner may interpret only the valid non-VPN packets of *Larson et al.* as corresponding to the claimed “extra-VPN traffic,” with the non-valid VPN packets being neither inter- or extra-VPN traffic, there is still the problem of the valid-VPN packets and the valid non-VPN packets being sent along the **same** logical connection. Therefore, no matter how the packets of *Larson et al.* are interpreted, the claimed features are not suggested.

Even if *Larson et al.* is employed only for the teaching of prioritizing VPN traffic over non-VPN traffic, relying on *Seid et al.* for the remainder of the claimed subject matter, the combination would still not result in the claimed invention. The mere, general teaching of prioritizing VPN packets over non-VPN packets (as in *Larson et al.*) does not suggest why a first access network logical connection should be assigned priority over a **separate second access network logical connection.**

The Decision by the Board on July 30, 2010 interpreted the double-headed arrows connecting the three nodes in VPN3 of *Seid et al.* as corresponding to the claimed “first access network logical connection,” and the double-headed arrow connecting NODE D to the leftmost node in VPN3 of *Seid et al.* as corresponding to the claimed “second access network logical connection.” Since *Seid et al.* lacks any suggestion of prioritizing any packets on these separate connections, and *Larson et al.* only suggests prioritizing VPN packets over non-VPN packets **over a single path**, or logical connection, nothing, other than impermissible hindsight gleaned from Applicant’s disclosure, would have led the person of ordinary skill in the art to prioritize packets on the path represented by the double-headed arrows connecting the three nodes in

VPN3 over packets on the **separate** path represented by the double-headed arrow connecting NODE D to the leftmost node in VPN3.

Accordingly, the rejection of claims 1, 3-9, 11-16, and 18-23 under 35 U.S.C. §103(a) based on *Seid et al.* in view of *Larson et al.* is neither factually nor legally viable. Therefore, withdrawal of this rejection is respectfully solicited.

The rejection of claims 1-24 under 35 U.S.C. §103(a) based on Admitted Prior Art (APA), referring to page 3, line 13-page 5, line 20 and Figures 1 and 2 of the application, in view of *Seid et al.* (US 5,768,271) and *Larson et al.* (US 7,188,180) is respectfully traversed.

APA, relied on for the asserted teaching of providing general knowledge of VPNs comprising egress routers connected to an access network, and ingress routers coupled to egress routers, does not provide for the deficiencies of *Seid et al.* in view of *Larson et al.*, previously argued, regarding assigning priority to a first access network logical connection over a separate second access network logical connection.

Accordingly, the rejection of claims 1-24 under 35 U.S.C. §103(a) based on APA in view of *Seid et al.* *Larson et al.* is neither factually nor legally viable. Therefore, withdrawal of this rejection is respectfully solicited.

With respect to new dependent claims 25-28, these claims are fully supported in the Specification. For example, the features of new claims 25 and 26 are supported by paragraph [0034], new claims 26 and 27 by paragraph [0035], and the features of new claim 27 by paragraph [0046]. These claims 25-28 are allowable at least for the reasons put forth for the allowability of the corresponding independent claims. Moreover, they are patentable separately from the claims from which they depend.

For example, claim 26 recites, “wherein the WAN physical port employing a **scheduler** to multiplex packets from said first and second logical ports onto a transmission medium of said access network and to forward packets received from said access network to the first and second logical ports.”

Neither APA, *Seid et al.*, nor *Larson et al.* discloses or suggests such a scheduler, which has two functions, viz., 1) to multiplex packets from said first and second logical ports onto a transmission medium of said access network, and 2) to forward packets received from said access network to the first and second logical ports.

Claim 27 recites, “wherein packets received by a port of the CPE edge router pass through a **classifier**, which determines, by reference to a table, how each packet will be handled by the CPE edge router.”

Not one of APA, *Seid et al.*, or *Larson et al.* discloses or suggests such a classifier, which employs a table to determine how received packets will be handled by the CPE edge router.

Claim 28 recites, “wherein the plurality of tunnels are implemented utilizing one of IP-over-IP tunnel, a Generic Routing Encapsulation (GRE) tunnel, an Internet Protocol Security (IPSec) operated in tunnel mode, a set of stacked Multi-Protocol Label Switching (MPLS) labels, a Layer 2 Tunneling Protocol (L2TP), and a null tunnel.”

Not one of APA, *Seid et al.*, or *Larson et al.* discloses or suggests such techniques for tunneling because none of these references discloses, or even suggests, the plurality of ingress routers being implemented by the **plurality of tunnels** logically partitioning intra-VPN and extra-VPN traffic, of claim 7. Although the Examiner identifies col. 12, lines 20-30, of *Seid et al.*, as teaching the tunneling feature, reference to that cited portion of the reference, or any other portion of the reference, reveals such tunneling. In fact, the cited portion of the reference

relates to allowing isolation of traffic of one user, or VPN, from the traffic of another user, or VPN. There is no mention of tunneling.

Accordingly, allowance of claims 25-28 is respectfully solicited.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 519-9952 so that such issues may be resolved as expeditiously as possible.

As Applicant's remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicant's silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, ability to combine references, assertions as to patentability of dependent claims) is not a concession by Applicant that such assertions are accurate or such requirements have been met, and Applicant reserves the right to analyze and dispute such in the future.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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